```
=> d his
```

```
(FILE 'HOME' ENTERED AT 14:51:20 ON 28 APR 2004)
```

FILE 'REGISTRY' ENTERED AT 14:51:33 ON 28 APR 2004
L1 STRUCTURE UPLOADED
L2 5 S L1
L3 86 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:52:23 ON 28 APR 2004 L4 4 S L3

=> d 11

L1 HAS NO ANSWERS

L1 STR

Structure attributes must be viewed using STN Express query preparation.

```
=> d 1-4 bib abs hitstr
```

```
ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
    2003:434369 CAPLUS
    139:26620
DN
    Topical pharmaceuticals comprising an immune response modifier
TT
    Skwierczynski, Raymond D.; Busch, Terri F.; Gust-Heiting, Amy L.;
IN
     Fretland, Mary T.; Scholz, Matthew T.
     3M Innovative Properties Company, USA
     PCT Int. Appl., 123 pp.
SO
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
     PATENT NO.
                     KIND DATE
                                          APPLICATION NO. DATE
                           _____
                                          WO 2002-US38190 20021127
                           20030605
    WO 2003045391
                     A1
        W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
```

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2002-306019 20021127

US 2003199538 A1 20031023 PRAI US 2001-340605P P 20011129

US 2002-378452P P 20020506

OS MARPAT 139:26620

GΙ

AB Pharmaceutical formulations comprise an immune response modifier (IRM) chosen from imidazoquinoline amines, imidazotetrahydroquinoline amines, imidazopyridine amines, and other heterocyclic fused ring derivs.; a fatty acid; and a hydrophobic, aprotic component miscible with the fatty acid are useful for the treatment of dermal associated conditions. Topical formulations containing, e.g., I are provided. In one embodiment, the topical formulations are advantageous for treatment of actinic keratosis, postsurgical scars, basal cell carcinoma, atopic dermatitis, and warts.

434285-66-2 534568-82-6 534568-85-9 534568-87-1 534568-88-2

Ι

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (topical pharmaceuticals comprising an immune response modifier)

RN 534568-82-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1-methylethyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN 534568-85-9 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(methylsulfonyl)ethyl]-2-propyl(9CI) (CA INDEX NAME)

RN 534568-87-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(1methylethyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534568-88-2 CAPLUS

CN lH-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(ethylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN

AN 2003:417574 CAPLUS

DN 139:929

TI Toll-like receptor (TLR) pathway-based methods for identification of immune response modifier (IRM) compounds, and methods of use of such compounds

IN Gorden, Keith B.; Qiu, Xiaohong; Tomai, Mark A.; Vasilakos, John P.

PA 3M Innovative Properties Company, USA

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DT Patent

LA English FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2003043572 A2 20030530 WO 2002-US36758 20021114
WO 2003043572 A3 20030724

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

```
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
          LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
          PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT,
          TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD,
          RU, TJ, TM
     RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
          PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
          NE, SN, TD, TG
US 2004014779
                      A1 20040122
                                                US 2002-294935
                                                                    20021114
```

PRAI US 2001-332412P Р 20011116

Methods for identifying a compound that activates a TLR-mediated cellular signaling pathway is disclosed. The method includes (a) exposing a TLR-pos. cell culture to a test compound and measuring a TLR-mediated cellular response; (b) exposing a TLR-neg. cell culture to a test compound and measuring a TLR-mediated cellular response; and (c) identifying the test compound as an IRM if the cellular response in the TLR-pos. cell culture is greater than the cellular response of the TLR-neg. cell culture. Methods of eliciting a TLR-mediated cellular response are also disclosed. Such methods include administration of an IRM compound to an IRM-responsive cell so that the IRM compds. affects at least one TLR-mediate cellular signaling pathway.

TT 434285-67-3

CN

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(toll-like receptor pathway-based methods for identification of immune response modifier compds., and methods of use of such compds.)

434285-67-3 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[5-(methylsulfonyl)pentyl]-(9CI) (CA INDEX NAME)

```
ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
```

2003:414123 CAPLUS ΑN

139:6869 DN

Preparation of thioether substituted imidazoquinolinamines as cytokine TΙ biosynthesis inducers for treatment of viral and neoplastic disease.

ΙN Bonk, Jason D.; Dellaria, Joseph F.; Merrill, Bryon A.; Radmer, Matthew R.

3M Innovative Properties Co., USA PA

U.S. Pat. Appl. Publ., 57 pp., Cont.-in-part of U.S. Ser. No. 13,059. SO CODEN: USXXCO

DT Patent

LA English

FAN.CNT 11									
	PATENT NO.	KIND	DATE	APPLICATION NO. DATE	DATE				
PI	US 200310076	54 A1	20030529	US 2002-165222 20020	20020607				
	US 6667312	B2	20031223						
	US 200217365	55 A1	20021121	US 2001-13059 20011	20011206				
	US 6664264	B2	20031216						
	WO 200305012	21 A1	20030619	WO 2002-US18290 20020	20020607				
	W: AE,	AG, AL, AN	1, AT, AT,	U, AZ, BA, BB, BG, BR, BY,	BZ, CA, CH,				
				E, DE, DK, DK, DM, DZ, EC,					
	FI,	FI, GB, GI	GE, GH,	M, HR, HU, ID, IL, IN, IS,	JP, KE, KG,				
	KP,	KR, KZ, LC	C, LK, LR,	S, LT, LU, LV, MA, MD, MG,	MK, MN, MW,				
	MX,	MZ, NO, NZ	C, OM, PH,	L, PT, RO, RU, SD, SE, SG,	SI, SK, SK,				
	SL,	TJ, TM, TN	I, TR, TT,	Z, UA, UG, US, UZ, VN, YU,	ZA, ZM, ZW,				
		AZ, BY, KO							
	RW: GH,	GM, KE, LS	s, MW, MZ,	D, SL, SZ, TZ, UG, ZM, ZW,	AT, BE, CH,				

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004072858 20040415 US 2003-675833 20030930 A 1

PRAI US 2000-254218P Р 20001208 US 2001-13059 A2 20011206

US 2001-11921 20011206 Α1

Т

MARPAT 139:6869 OS GΙ

Title compds. [I; X = CHR3, CHR3A; A = alkyl, alkenyl; Z = S, SO, SO2; R = alkyl, alkoxy, OH, halo, CF3; R1 = alkyl, aryl, heteroaryl, heterocyclyl, alkenyl, R4Ar; Ar = aryl, heteroaryl, heterocyclyl; R2 = H, (substituted) alkyl, alkenyl, Ar, etc.; R3 = H, alkyl; R4 = alkylene, alkenylene; n = 0-4], were prepared Thus, 2-butyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine in CHC13 was treated with 3-chloroperbenzoic acid over 15 min. followed by stirring at ambient temperature for 5 min. to give 2-butyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine. The latter showed interferon and tumor necrosis factor induction in human blood cells with lowest effective concns. of 0.01 and 0.04 μM , resp. I pharmaceutical compns. are claimed.

434285-63-9P 434285-66-2P 534582-84-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of thioether substituted imidazoquinolinamines as cytokine biosynthesis inducers for treatment of viral and neoplastic disease)

434285-63-9 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylthio)butyl]- (9CI) (CA CN INDEX NAME)

434285-66-2 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[5-(methylsulfonyl)pentyl]-CN (9CI) (CA INDEX NAME)

RN 534582-84-8 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[4-(methylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

434285-55-9P, 2-Butyl-1-[4-(phenylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-56-0P, 2-Buty1-1-[2-(phenylthio)ethyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine dihydrochloride 434285-57-1P, 2-Butyl-1-[4-(phenylsulfonyl)butyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-58-2P, 2-Butyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-59-3P, 2-Butyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-60-6P, 1-[2-(Phenylthio)ethyl]-1H-imidazo[4,5-c]quinolin-4amine 434285-61-7P, 1-[4-(Phenylsulfonyl)butyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-62-8P, 1-[4-(Methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-64-0P, 1-[4-(Methylthio)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-65-1P, 2-Buty1-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-67-3P, 2-Ethyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-68-4P, 1-{5-(Methylsulfonyl)pentyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-69-5P, 2-Hexyl-1-[5-(methylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-70-8P, 2-(2-Methoxyethyl)-1-(5-(methylsulfonyl)pentyl]-1Himidazo[4,5-c]quinolin-4-amine 434285-71-9P, 2-Butyl-1-[5-(methylthio)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-72-0P, 2-Butyl-1-[5-(methylsulfinyl)pentyl]-1H-imidazo[4,5c]quinolin-4-amine **434285-73-1P**, 2-Butyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine 434285-74-2P, 2-Butyl-1-[3-(phenylsulfonyl)propyl]-1H-imidazo[4,5c]quinolin-4-amine 434285-75-3P, 2-Butyl-1-[2-(phenylthio)ethyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine 534568-82-6P , 2-Butyl-1-[2-[(1-methylethyl)sulfonyl]ethyl]-1H-imidazo[4,5-c]quinoline-4-amine 534568-85-9P, 1-[2-(Methylsulfonyl)ethyl]-2-propyl-1Himidazo[4,5-c]quinolin-4-amine 534568-87-1P, 2-Ethyl-1-[4-[(1-methylethyl)sulfonyl]butyl]-1H-imidazo[4,5-c]quinoline-4amine 534568-88-2P, 2-Ethyl-1-[4-(ethylsulfonyl)butyl]-1Himidazo[4,5-c]quinoline-4-amine 534582-66-6P, 1-[5-(Methylsulfonyl)pentyl]-2-propyl-1H-imidazo[4,5-c]quinolin-4-amine **534582-67-7P**, 2-Methyl-1-[3-(methylthio)propyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-68-8P, 2-Methyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-69-9P, 2-Ethyl-1-[3-(methylthio)propyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-70-2P, 2-Ethyl-1-[3-(methylsulfonyl)propyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-71-3P, 2-Methyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-72-4P, 2-Methyl-1-[4-(methylsulfinyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-73-5P, 2-Ethyl-1-[4-(methylthio)butyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-75-7P, 2-Ethyl-1-[4-(methylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-77-9P, 1-[4-(Methylsulfonyl)butyl]-2-propyl-1H-imidazo[4,5c]quinolin-4-amine **534582-79-1P**, 2-Butyl-1-[4-(methylsulfinyl)butyl]-1H-imidazo[4,5-c]quinolin-4-amine 534582-81-5P, 2-Methyl-1-[2-(methylthio)ethyl]-1H-imidazo[4,5clquinolin-4-amine **534582-82-6P**, 2-Methyl-1-[2-(methylsulfonyl)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine **534582-86-0P**, 2-Ethyl-1-[2-(methylsulfonyl)ethyl]-1H-imidazo[4,5c]quinolin-4-amine 534582-89-3P, 2-Butyl-1-[4-[(2,4difluorophenyl)thio|butyl]-1H-imidazo[4,5-c]quinolin-4-amine

```
\textbf{534582-91-7P}, \ 2-\text{Butyl-1-[4-[(2,4-\text{difluorophenyl})\,sulfonyl]\,butyl]-1} + 1-\text{Minimal of the property of the property
imidazo[4,5-c]quinolin-4-amine 534582-92-8P,
2-Butyl-1-[4-(ethylsulfonyl)butyl]-1H-imidazo[4,5-c]quinoline-4-amine
534582-93-9P, 2-Butyl-1-[4-[(1,1-dimethylethyl)thio]butyl]-1H-
imidazo[4,5-c]quinoline-4-amine 534582-94-0P,
2-Butyl-1-[4-[(4-fluorophenyl)thio]butyl]-1H-imidazo[4,5-c]quinolin-4-
amine 534582-95-1P, 2-Butyl-1-[4-[(4-
fluorophenyl)sulfonyl]butyl]-1H-imidazo[4,5-c]quinolin-4-amine
534582-96-2P, 2-Ethyl-1-[4-[(1-methylethyl)thio]butyl]-1H-
imidazo[4,5-c]quinoline-4-amine 534582-97-3P,
1-[4-[(3,5-Dichlorophenyl)thio]butyl]-2-ethyl-1H-imidazo[4,5-c]quinolin-4-
amine 534582-98-4P, 1-[4-(Cyclopentylsulfonyl)butyl]-2-ethyl-1H-
imidazo[4,5-c]quinoline-4-amine 534582-99-5P,
1-[4-[(3,5-Dichlorophenyl)sulfonyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl)sulfonyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl]-2-ethyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5-Dichlorophenyl]butyl-1H-imidazo[4,5
c]quinolin-4-amine 534583-00-1P, 1-[4-(Cyclohexylthio)butyl]-2-
ethyl-lH-imidazo[4,5-c]quinoline-4-amine 534583-01-2P,
1-[4-(Butylthio)butyl]-2-ethyl-1H-imidazo[4,5-c]quinoline-4-amine
534583-02-3P, 1-[4-[(4-Chlorophenyl)thio]butyl]-2-ethyl-1H-
imidazo[4,5-c]quinolin-4-amine 534583-03-4P,
1-[4-(Butylsulfonyl)butyl]-2-ethyl-1H-imidazo[4,5-c]quinoline-4-amine
534583-04-5P, 2-Ethyl-1-[4-[(4-fluorophenyl)thio]butyl]-1H-
imidazo[4,5-c]quinolin-4-amine 534583-05-6P,
2-Ethyl-1-[4-(ethylthio)butyl]-1H-imidazo[4,5-c]quinoline-4-amine
534583-06-7P, 1-[4-(Cyclohexylsulfonyl)butyl]-2-ethyl-1H-
imidazo[4,5-c]quinoline-4-amine 534583-07-8P,
2-Butyl-1-[2-(phenylsulfonyl)ethyl]-1H-imidazo[4,5-c]quinoline-4-amine
534583-08-9P, 2-Butyl-1-[2-[(4-fluorophenyl)sulfonyl]ethyl]-1H-
imidazo[4,5-c]quinolin-4-amine 534583-09-0P,
2-Butyl-1-[2-[(1,1-dimethylethyl)sulfonyl]ethyl]-1H-imidazo[4,5-c]quinolin-
4-amine 534583-10-3P, 2-Butyl-1-[2-[(1,1-
dimethylethyl)thio]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine
534583-11-4P, 2-Butyl-1-[2-(propylsulfonyl)ethyl]-1H-imidazo[4,5-
c]quinoline-4-amine 534583-12-5P, 2-Butyl-1-[2-
 (propylthio)ethyl]-1H-imidazo[4,5-c]quinoline-4-amine 534583-13-6P
 , 2-Butyl-1-[2-[(2-methylpropyl)sulfonyl]ethyl]-1H-imidazo[4,5-c]quinolin-
4-amine 534583-14-7P, 2-Butyl-1-[2-[(2-methylpropyl)thio]ethyl]-1H-imidazo[4,5-c]quinolin-4-amine 534583-15-8P,
2-Butyl-1-[2-(ethylsulfonyl)ethyl]-1H-imidazo[4,5-c]quinoline-4-amine
534583-16-9P, 2-Butyl-1-[2-(ethylthio)ethyl]-1H-imidazo[4,5-
clquinoline-4-amine 534583-17-0P, 2-Butyl-1-[2-
 (methylsulfonyl)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine
534583-46-5P, 2-Methyl-1-[6-(methylsulfonyl)hexyl]-1H-imidazo[4,5-
c]quinolin-4-amine 534583-96-5P, 1-[5-(Phenylsulfonyl)pentyl]-1H-
imidazo[4,5-c]quinolin-4-amine 534584-60-6P,
1-[5-(Methylsulfonyl)pentyl]-2-(trifluoromethyl)-1H-imidazo[4,5-c]quinolin-
4-amine 534585-79-0P, 2-(2-Methoxyethyl)-1-[5-
 (phenylsulfonyl)pentyl]-1H-imidazo[4,5-c]quinolin-4-amine
534585-85-8P, 2-Ethyl-1-[4-(pyrimidin-2-ylthio)butyl]-1H-
imidazo[4,5-c]quinolin-4-amine 534585-88-1P,
2-Ethyl-1-[4-(pyrimidin-2-ylsulfonyl)butyl]-1H-imidazo[4,5-c]quinolin-4-
amine 534585-90-5P, 2-Methyl-1-[4-(methylsulfonyl)butyl]-6,7,8
 9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine 534585-92-7P,
2-Methyl-1-[5-(methylsulfonyl)pentyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-
c]quinolin-4-amine 534585-94-9P, 2-Methyl-1-[4-[(1-
methylethyl)sulfonyl}butyl]-6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-
amine 534585-96-1P, 2-Methyl-1-[4-[(4-
fluorophenyl) \\ sulfonyl] \\ butyl] \\ -6,7,8,9 \\ -tetrahydro-l\\ \\ -imidazo[4,5-c] \\ quinolin-letrahydro-l\\ \\ -imidazo[4,5-c] \\ \\ -imidazo[4,5-c] 
4-amine 534585-98-3P, 2-Methyl-1-[4-[(1,1-
\label{lem:dimethylethyl} \verb| sulfonyl| butyl| -6,7,8,9-tetrahydro-1 H-imidazo[4,5-c] quinolin-dimethylethyl| constant and the sulfonylethylethyl| constant and the sulfonylethylethyl| constant and the sulfonylethylethyl| constant and the sulfonylethyl| 
4-amine 534588-03-9P, 2-Ethoxymethyl-1-(4-methanesulfonylbutyl)-
6,7,8,9-tetrahydro-1H-imidazo[4,5-c]quinolin-4-amine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
          (preparation of thioether substituted imidazoquinolinamines as cytokine
         biosynthesis inducers for treatment of viral and neoplastic disease)
 434285-55-9 CAPLUS
 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylthio)butyl]- (9CI)
```

N 1H-Imidazo[4,5-(CA INDEX NAME)

RN

RN 434285-56-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 434285-57-1 CAPLUS

RN 434285-58-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-59-3 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylsulfonyl)butyl](9CI) (CA INDEX NAME)

RN 434285-60-6 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 434285-61-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-62-8 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-64-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, l-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-67-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-68-4 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]- (9CI)
(CA INDEX NAME)

RN 434285-69-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-hexyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-70-8 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(2-methoxyethyl)-1-[5-(methylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 434285-71-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylthio)pentyl]- (9CI) (CA INDEX NAME)

RN 434285-72-0 CAPLUS

N 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfinyl)pentyl]-(9CI) (CA INDEX NAME)

RN 434285-73-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylsulfonyl)propyl}-(9CI) (CA INDEX NAME)

RN 434285-74-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylsulfonyl)propyl](9CI) (CA INDEX NAME)

RN 434285-75-3 CAPLUS

CN lH-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 534568-82-6 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1-methylethyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN 534568-85-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(methylsulfonyl)ethyl]-2-propyl-(9CI) (CA INDEX NAME)

RN 534568-87-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(1-methylethyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534568-88-2 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(ethylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

RN 534582-66-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]-2-propyl(9CI) (CA INDEX NAME)

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[3-(methylthio)propyl]-(9CI) (CA INDEX NAME)

RN 534582-68-8 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[3-(methylsulfonyl)propyl]-(9CI) (CA INDEX NAME)

RN 534582-69-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[3-(methylthio)propyl]- (9CI) (CA INDEX NAME)

RN 534582-70-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[3-(methylsulfonyl)propyl]-(9CI) (CA INDEX NAME)

$$\begin{array}{c} 0 \\ \parallel \\ \text{Me-S-(CH_2)3} \\ \parallel \\ 0 \\ \text{Et} \\ N \\ N \\ NH_2 \\ \end{array}$$

RN 534582-71-3 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 534582-72-4 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[4-(methylsulfinyl)butyl]-(9CI) (CA INDEX NAME)

RN 534582-73-5 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

CN

RN 534582-75-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(methylsulfonyl)butyl](9CI) (CA INDEX NAME)

RN 534582-77-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylsulfonyl)butyl]-2-propyl-(9CI) (CA INDEX NAME)

RN 534582-79-1 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylsulfinyl)butyl]-CN (9CI) (CA INDEX NAME)

534582-81-5 CAPLUS

RN1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[2-(methylthio)ethyl]- (9CI) CN (CA INDEX NAME)

534582-82-6 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[2-(methylsulfonyl)ethyl]-CN (9CI) (CA INDEX NAME)

534582-86-0 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[2-(methylsulfonyl)ethyl]-CN (9CI) (CA INDEX NAME)

RN 534582-89-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(2,4-difluorophenyl)thio]butyl]- (9CI) (CA INDEX NAME)

RN 534582-91-7 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(2,4-difluorophenyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534582-92-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(ethylsulfonyl)butyl](9C1) (CA INDEX NAME)

RN 534582-93-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(1,1-dimethylethyl)thio]butyl]- (9CI) (CA INDEX NAME)

RN 534582-94-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(4-fluorophenyl)thio]butyl]- (9CI) (CA INDEX NAME)

RN 534582-95-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-[(4-fluorophenyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534582-96-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(1-methylethyl)thio]butyl]- (9CI) (CA INDEX NAME)

RN 534582-97-3 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(3,5-dichlorophenyl)thio]butyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 534582-98-4 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(cyclopentylsulfonyl)butyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 534582-99-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(3,5-dichlorophenyl)sulfonyl]butyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 534583-00-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(cyclohexylthio)butyl]-2-ethyl(9CI) (CA INDEX NAME)

RN 534583-01-2 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(butylthio)butyl]-2-ethyl- (9CI) (CA INDEX NAME)

RN 534583-02-3 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(4-chlorophenyl)thio]butyl]-2-CN ethyl- (9CI) (CA INDEX NAME)

534583-03-4 CAPLUS RN

 $1 \\ H-Imidazo[4,5-c] \\ quinolin-4-amine, \\ 1-[4-(butylsulfonyl)butyl]-2-ethyl-1 \\ H-Imidazo[4,5-c] \\ H-Imidazo[4,5-c]$ CN (9CI) (CA INDEX NAME)

RN

534583-04-5 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-[(4-fluorophenyl)thio]butyl]- (9CI) (CA INDEX NAME) CN

RN 534583-05-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(ethylthio)butyl]- (9CI)
(CA INDEX NAME)

RN 534583-06-7 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(cyclohexylsulfonyl)butyl]-2-ethyl(9CI) (CA INDEX NAME)

RN 534583-07-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(phenylsulfonyl)ethyl](9CI) (CA INDEX NAME)

RN

534583-08-9 CAPLUS 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(4-fluorophenyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME) CN

RN

534583-09-0 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1,1-dimethylethyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN

534583-10-3 CAPLUS
1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(1,1-dimethylethyl)thio]ethyl]- (9CI) (CA INDEX NAME) CN

RN 534583-11-4 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(propylsulfonyl)ethyl]-(9CI) (CA INDEX NAME)

RN 534583-12-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(propylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 534583-13-6 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(2methylpropyl)sulfonyl]ethyl]- (9CI) (CA INDEX NAME)

RN 534583-14-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-[(2-methylpropyl)thio]ethyl]- (9CI) (CA INDEX NAME)

RN 534583-15-8 CAPLUS

CN lH-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(ethylsulfonyl)ethyl]-(9CI) (CA INDEX NAME)

RN 534583-16-9 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(ethylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 534583-17-0 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(methylsulfonyl)ethyl]-(9CI) (CA INDEX NAME)

RN 534583-46-5 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[6-(methylsulfonyl)hexyl](9CI) (CA INDEX NAME)

RN 534583-96-5 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(phenylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 534584-60-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]-2(trifluoromethyl)- (9CI) (CA INDEX NAME)

RN 534585-79-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(2-methoxyethyl)-1-[5-(phenylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 534585-85-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(2-pyrimidinylthio)butyl](9CI) (CA INDEX NAME)

RN 534585-88-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[4-(2-pyrimidinylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 534585-90-5 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 6,7,8,9-tetrahydro-2-methyl-1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 534585-92-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 6,7,8,9-tetrahydro-2-methyl-1-[5-(methylsulfonyl)pentyl]- (9CI) (CA INDEX NAME)

RN 534585-94-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 6,7,8,9-tetrahydro-2-methyl-1-[4-[(1-methylethyl)sulfonyl]butyl]- (9CI) (CA INDEX NAME)

RN 534585-96-1 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(4-fluorophenyl)sulfonyl]butyl]6,7,8,9-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)

RN 534585-98-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-[(1,1-dimethylethyl)sulfonyl]butyl]-6,7,8,9-tetrahydro-2-methyl- (9CI) (CA INDEX NAME)

RN 534588-03-9 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(ethoxymethyl)-6,7,8,9-tetrahydro-1[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

434286-34-7P, 2-Butyl-1-[3-(methylthio)propyl]-1H-imidazo[4,5-ITc]quinolin-4-amine 434286-35-8P, 2-Butyl-1-[3-(phenylthio)propyl]-lH-imidazo[4,5-c]quinolin-4-amine 534586-60-2P , 1-[5-(Methylthio)pentyl]-2-propyl-1H-imidazo[4,5-c]quinoline-4-amine 534586-86-2P, 1-[4-(Methylthio)butyl]-2-propyl-1H-imidazo[4,5c]quinolin-4-amine 534587-09-2P, 2-Butyl-1-[2-(methylthio)ethyl]-1H-imidazo[4,5-c]quinolin-4-amine 534587-17-2P, 2-Methyl-1-[6-(methylthio)hexyl]-1H-imidazo[4,5-c]quinolin-4-amine RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of thioether substituted imidazoquinolinamines as cytokine biosynthesis inducers for treatment of viral and neoplastic disease) 434286-34-7 CAPLUS RN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylthio)propyl]- (9CI) CN (CA INDEX NAME)

RN 434286-35-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylthio)propyl]- (9CI)
(CA INDEX NAME)

RN 534586-60-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylthio)pentyl]-2-propyl(9CI) (CA INDEX NAME)

534586-86-2 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylthio)butyl]-2-propyl- (9CI) CN (CA INDEX NAME)

534587-09-2 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[2-(methylthio)ethyl]- (9CI) CN (CA INDEX NAME)

534587-17-2 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[6-(methylthio)hexyl]- (9CI) CN (CA INDEX NAME)

```
L4
    ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
```

2002:449683 CAPLUS ΑN

DΝ 137:20377

TΙ Preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4amines and analogs as cytokine biosynthesis inducers

Dellaria, Joseph F.; Merrill, Bryon A.; Radmer, Matthew R. IN

3M Innovative Properties Company, USA PA

SO PCT Int. Appl., 66 pp.

CODEN: PIXXD2

DTPatent

English LA

FAN.	CNT	11																	
	PATENT NO.			KIND DATE			APPLICATION NO.					Э.	DATE						
PI	WO 2002046192		A.	2 .	20020613			WO 2001-US46697				97	20011206						
	WO 2002046192		A.	A3 20030213															
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	DZ,	EC,	EE,	EE,	ES,	
			FI,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	ΚG,	
			KΡ,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	
			MX,	MZ,	NO,	NZ,	PH,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SK,	SL,	
			TJ,	TM,	TR,	TT,	ŢZ,	UA,	UG,	US,	UZ,	VN,	ΥU,	ZA,	ZW,	AM,	ΑZ,	BY,	
			KG,	ΚZ,	MD,	RU													
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	ΑT,	BE,	CH,	

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG AU 2002039530 Α5 20020618 AU 2002-39530 20011206 20030403 US 2001-11921 20011206 US 2003065005 A1 US 6664260 B2 20031216 EP 1341791 A2 20030910 EP 2001-987297 20011206 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR EE 2003-275 EE 200300275 20031015 20011206 20030606 NO 2003-2595 20030606 NO 2003002595 Α US 2003-675833 20030930 20040415 US 2004072858 A1 PRAI US 2000-254218P Ρ 20001208 US 2001-11921 **A**1 20011206 20011206 WO 2001-US46697 MARPAT 137:20377 os GI

AB Title compds. [(un)substituted I; R = Z2Z1R1; R1 = alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R2 = H, alk(en)yl, heterocyclyl, (hetero)aryl, etc.; R3 = NH2; Z1 = S00-2; Z2 = alkylene; dashed lines = optional addnl. bonds], useful as immune response modifiers, were prepared Thus, 4-chloro-3-nitroquinoline was aminated by H2N(CH2)4OH and O-protected product reduced to give, after cyclocondensation with BuC(OMe)3, I (R2 = Bu, dashed lines = bonds)[II; R = (CH2)4OSiCMe2CMe3, R3 = H] which was converted in 4 steps to II [R = (CH2)4SPh, R3 = NH2]. Data for biol. activity of I were given.

T 434285-63-9P

RN

CN

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-amines and analogs as cytokine biosynthesis inducers)

434285-63-9 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylthio)butyl]- (9CI) (CA INDEX NAME)

IT 434285-55-9P 434285-56-0P 434285-57-1P 434285-58-2P 434285-59-3P 434285-60-6P 434285-61-7P 434285-62-8P 434285-64-0P 434285-65-1P 434285-66-2P 434285-67-3P 434285-68-4P 434285-69-5P 434285-70-8P 434285-71-9P 434285-72-0P 434285-73-1P 434285-74-2P 434285-75-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-amines and analogs as cytokine biosynthesis inducers)

RN 434285-55-9 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-56-0 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-(phenylthio)ethyl]-, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 434285-57-1 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(phenylsulfonyl)butyl]-(9CI) (CA INDEX NAME)

RN 434285-58-2 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-59-3 CAPLUS

 $\label{eq:cn_loss} $$1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[4-(methylsulfonyl)butyl]-$$$

(9CI) (CA INDEX NAME)

RN 434285-60-6 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[2-(phenylthio)ethyl]- (9CI) (CA INDEX NAME)

RN 434285-61-7 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(phenylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-62-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylsulfonyl)butyl]- (9CI) (CA INDEX NAME)

RN 434285-64-0 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[4-(methylthio)butyl]- (9CI) (CA INDEX NAME)

RN 434285-65-1 CAPLUS CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfonyl)pentyl]-(9CI) (CA INDEX NAME)

RN 434285-66-2 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-methyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-67-3 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-ethyl-1-[5-(methylsulfonyl)pentyl](9CI) (CA INDEX NAME)

RN 434285-68-4 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 1-[5-(methylsulfonyl)pentyl]- (9CI)
(CA INDEX NAME)

434285-69-5 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-hexyl-1-[5-(methylsulfonyl)pentyl]-CN (9CI) (CA INDEX NAME)

434285-70-8 CAPLUS

RN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-(2-methoxyethyl)-1-[5-CN (methylsulfonyl)pentyl) - (9CI) (CA INDEX NAME)

RN 434285-71-9 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylthio)pentyl)- (9CI) CN (CA INDEX NAME)

RN 434285-72-0 CAPLUS

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[5-(methylsulfinyl)pentyl]-CN (9CI) (CA INDEX NAME)

434285-73-1 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylsulfonyl)propyl]-CN (9CI) (CA INDEX NAME)

434285-74-2 CAPLUS RN

1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylsulfonyl)propyl]-CN (9CI) (CA INDEX NAME)

434285-75-3 CAPLUS RN

lH-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-6,7,8,9-tetrahydro-1-[2-CN (phenylthio)ethyl)- (9CI) (CA INDEX NAME)

434286-34-7P 434286-35-8P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 1-(alkyl- or arylthioalkyl) imidazo[4,5-c]quinoline-4-amines and analogs as cytokine biosynthesis inducers)

434286-34-7 CAPLUS

CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(methylthio)propyl]- (9CI) (CA INDEX NAME)

RN 434286-35-8 CAPLUS
CN 1H-Imidazo[4,5-c]quinolin-4-amine, 2-butyl-1-[3-(phenylthio)propyl]- (9CI)
(CA INDEX NAME)

=>